

EXHIBIT 3

5 of 6

APPROVED BY DRAFTSMAN	O.G. FIG.	
	CLASS	SUBCLASS

FUSE	UNI IN	UNI OUT	BI	TRI
L1	R	X	X	X
L2	X	R	X	X
L3	X	X	R	X
L4	X	X	X	R
L5	R	R	R	X

R – RETAIN
X – DISCONNECT

FIG. 6

APPROVED BY DRAFTSMAN	O.G. FIG.	
	CLASS	SUBCLASS

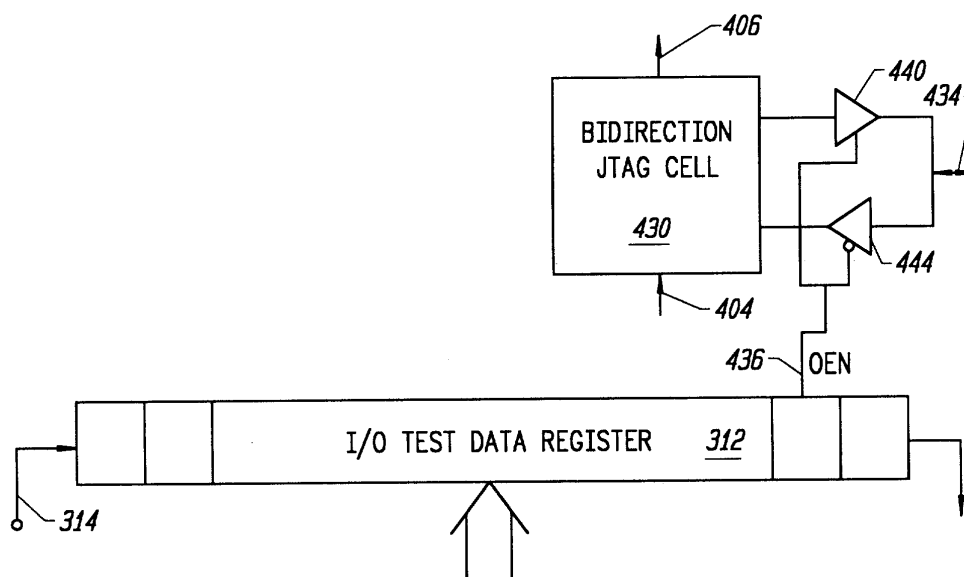


FIG. 7

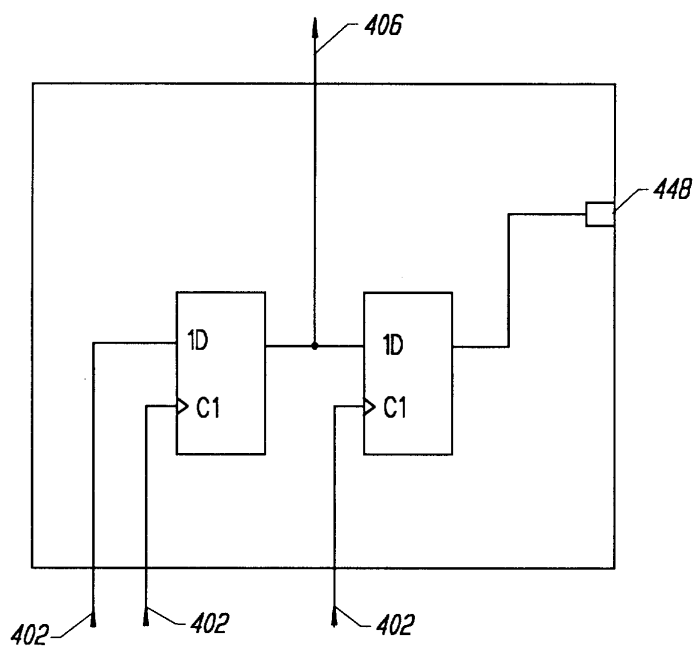
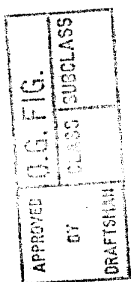


FIG. 8

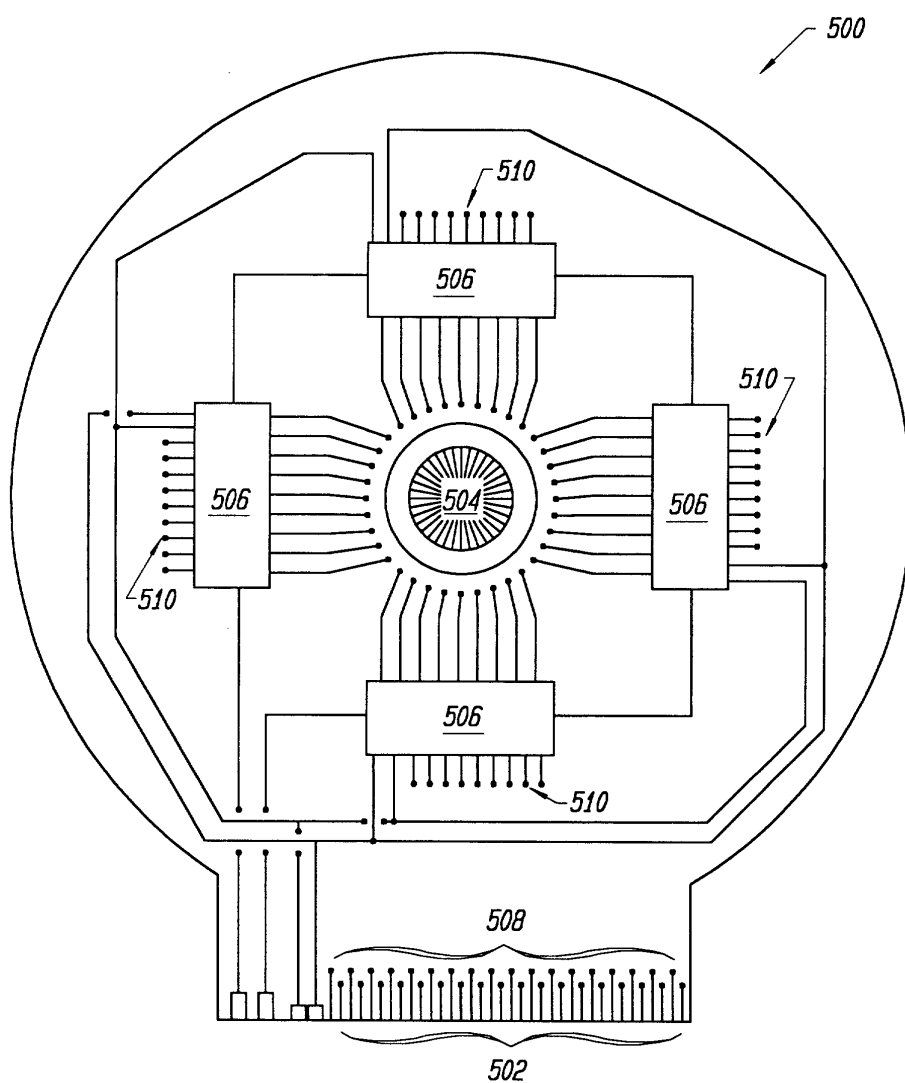
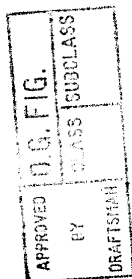
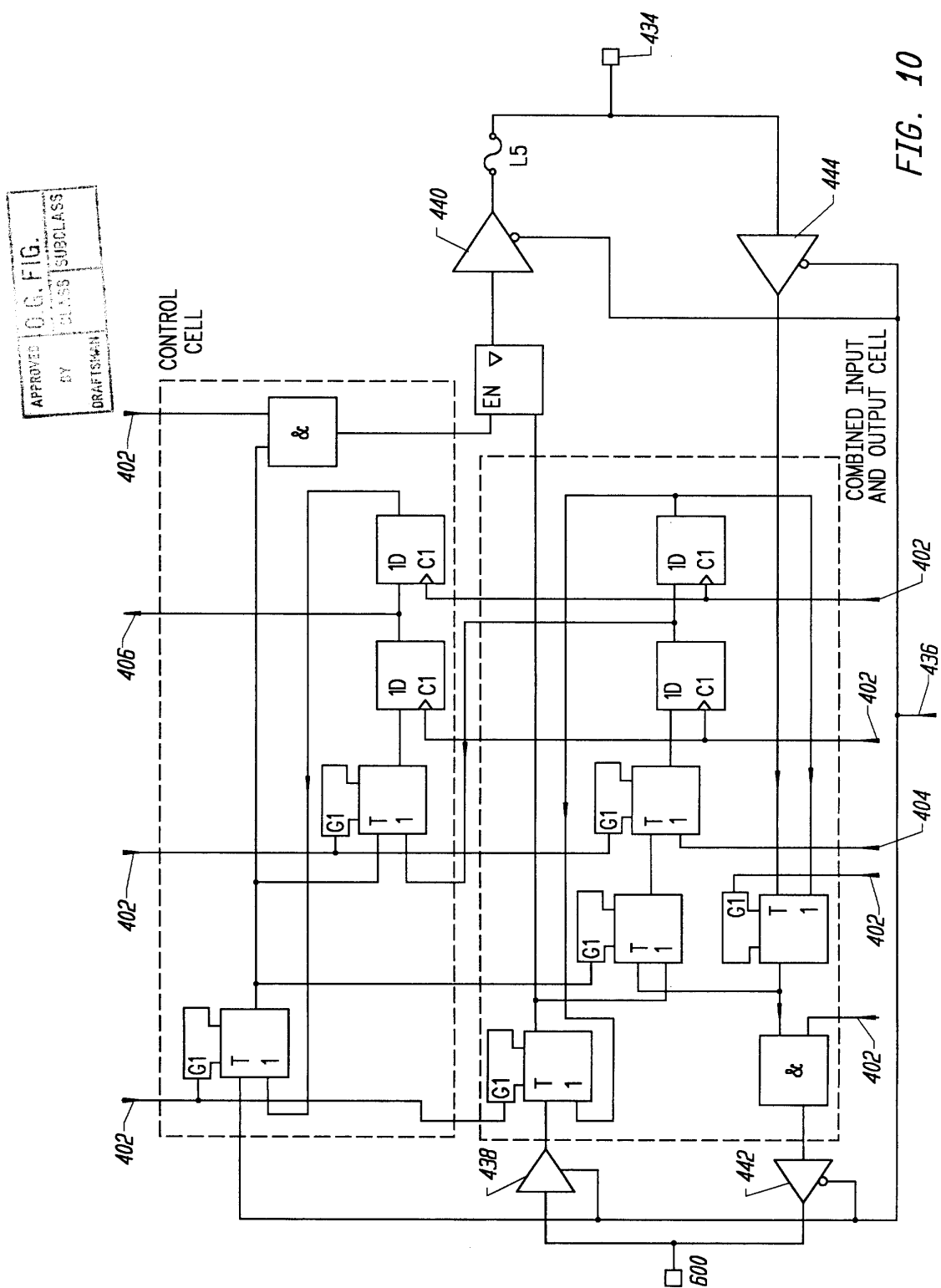


FIG. 9



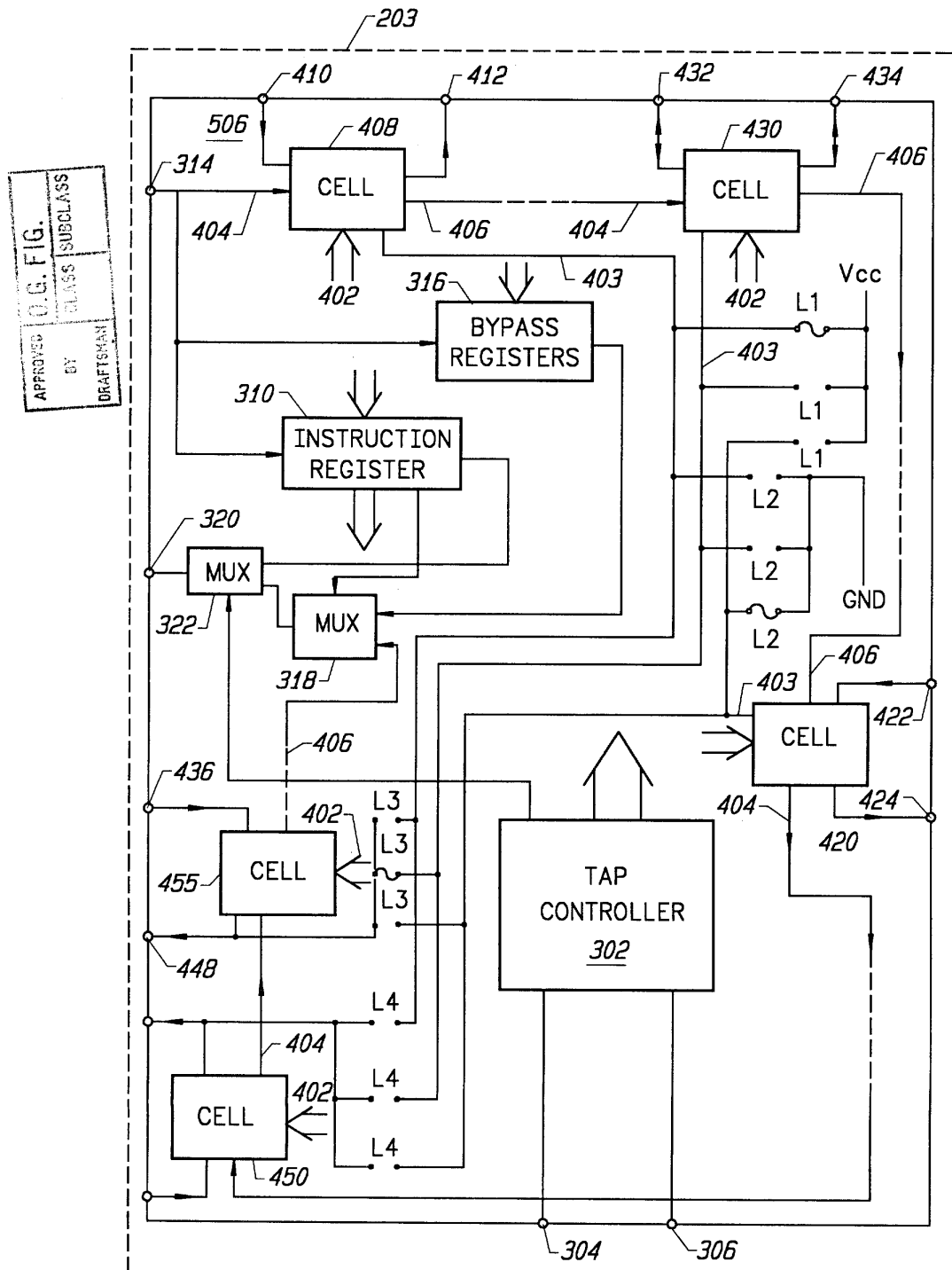


FIG. 11

PTO UTILITY GRANT

Paper Number 13

The
United
States
of
America

The Commissioner of Patents
and Trademarks

*Has received an application for a patent
for a new and useful invention. The title
and description of the invention are en-
closed. The requirements of law have
been complied with, and it has been de-
termined that a patent on the invention
shall be granted under the law.*

Therefore, this

United States Patent

*Grants to the person or persons having
title to this patent the right to exclude
others from making, using or selling the
invention throughout the United States
of America for the term of seventeen
years from the date of this patent, sub-
ject to the payment of maintenance fees
as provided by law.*



Bence Lehman

Commissioner of Patents and Trademarks

Jandra L. Morton

Attest

PTO-1584

Staple Issue Slip Here

SERIAL NUMBER (Series of 1987)		PATENT DATE		PATENT NUMBER	
07/685878					

SERIAL NUMBER	FILING DATE	CLASS	SUBCLASS	GROUP ART UNIT	EXAMINER
07/685,878	04/15/91	324	158P	257A 2607	BURNS

APPLICANTS DANIEL B. D'SOUZA, SANTA CLARA, CA.

CONTINUING DATA**
VERIFIED
MBB 8/23/91

FOREIGN/PCT APPLICATIONS**
VERIFIED
BB 8/23/91

FOREIGN FILING LICENSE GRANTED 06/20/91

Foreign priority claimed 35 USC 119 conditions met	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	AS FILED	STATE OR COUNTRY	SHEETS DRWGS.	TOTAL CLAIMS	INDEP. CLAIMS	FILING FEE RECEIVED	ATTORNEY'S DOCKET NO.
Verified and Acknowledged	BB	→	CA	11	16	2	\$ 750.00	A-54591/JAS

ADDRESS FLEHR, HOBBACH, TEST
ALBRITTON & HERBERT
STE. 3400, FOUR EMBARCADERO CENTER
SAN FRANCISCO, CA 94111

TITLE ACTIVE PROBE CARD

U.S. DEPT. of COMM.-Pat. & TM Office -- PTO-436L (rev. 10-78)

PARTS OF APPLICATION FILED SEPARATELY					
NOTICE OF ALLOWANCE MAILED		PREPARED FOR ISSUE		CLAIMS ALLOWED	
		Assistant Examiner	Docket Clerk	Total Claims	Print Claim
ISSUE FEE		Primary Examiner		DRAWING	
Amount Due	Date Paid			Sheets Drwg.	Figs. Drwg.
Label Area		ISSUE CLASSIFICATION		ISSUE BATCH NUMBER	
		Class	Subclass		
WARNING: The information disclosed herein may be restricted. Unauthorized disclosure may be prohibited by the United States Code Title 35, Sections 122, 181 and 368. Possession outside the U.S. Patent & Trademark Office is restricted to authorized employees and contractors only.					

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INITIALS

07/685878

Entered
or
Counted

CONTENTS

Received
or
Mailed

1.	Application	papers + 11 pgs.	
2.	<i>Letter of Discharge</i>		5-08-91
3.	<i>Rec. Surcharge</i>		5-31-91
4.	<i>Reg 3(mo)</i>	HC	9-10-91 8-26
5.	<i>Reg. Exp. ②</i>		01-21-92
6.	<i>Amolt A</i>		01-21-92
7.	<i>Final Reg 3mos</i>		5-4-92 KM
8.	<i>argument</i>		July 27, 1992
9.	<i>advisory action</i>		8-4-92 JH
10.	<i>Notice of abandonment</i>		11-9-92
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POSITION	INIT.	DATE
CLASSIFIER	8	4-24-91
EXAMINER	299	5-1
TYPIST		
VERIFIER	258	6/20/91
CORPS CORR.		
SPEC. HAND	LEB	6-12-91
FILE MAINT.	TW	5/7/91

INDEX OF CLAIMS

Claim	Date
Final	
Original	
1	✓
2	✓
3	✓
4	✓
5	✓
6	✓
7	✓
8	✓
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SYMBOLS

✓ Rejected

= Allowed

- (Through numeral) Canceled

+ Restricted

N Non-elected

I Interference

A Appeal

D Objected

Claim	Date
Final	
Original	
51	
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[illegible]

SEARCH NOTES		
	Date	Exmr.

INTERFERENCE SEARCHED			
Class	Sub.	Date	Exmr.

PATENT APPLICATION FEE DETERMINATION RECORD					Application or Docket Number 685878		
CLAIMS AS FILED - PART I					SMALL ENTITY OR OTHER THAN SMALL ENTITY		
(Column 1)	(Column 2)				RATE	FEE	
FOR	NUMBER FILED	NUMBER EXTRA			RATE	FEE	
BASIC FEE					\$ 315.00	OR	
TOTAL CLAIMS	16	minus 20 =	*	x \$10 =		OR	
INDEPENDENT CLAIMS	2	minus 3 =	*	x 30 =		OR	
MULTIPLE DEPENDENT CLAIM PRESENT				+ 100 =		OR	
				TOTAL		OR	
				TOTAL 630			
* If the difference in column 1 is less than zero, enter "0" in column 2							
CLAIMS AS AMENDED - PART II					SMALL ENTITY OR OTHER THAN SMALL ENTITY		
(Column 1)		(Column 2)		(Column 3)			
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE	ADDI-TIONAL FEE	
	Total	*	Minus	**	=	OR	
	Independent	*	Minus	***	=	OR	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM					+ 100 =	OR
						TOTAL	OR
(Column 1)		(Column 2)		(Column 3)		ADDIT. FEE	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE	ADDI-TIONAL FEE	
	Total	*	Minus	**	=	OR	
	Independent	*	Minus	***	=	OR	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM					+ 100 =	OR
						TOTAL	OR
(Column 1)		(Column 2)		(Column 3)		ADDIT. FEE	
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE	ADDI-TIONAL FEE	
	Total	*	Minus	**	=	OR	
	Independent	*	Minus	***	=	OR	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM					+ 100 =	OR
						TOTAL	OR
(Column 1)		(Column 2)		(Column 3)		ADDIT. FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.							

07/685878

PALM III APPLICATION FILE DATA CODING SHEET

U.S. DEPARTMENT OF COMMERCE-PATENT & TM OFFICE

PREPARED BY

Iven

DATE

3-1

FORMAT NO. 2 Serial No. TYPE APPL

07

FILING DATE

Month

Special Handling

GROUP ART UNIT

CLASS

SHEETS OF DRAWINGS

TOTAL CLAIMS

INDEPENDENT CLAIMS

SMALL ENTITY?

FILING FEE RECEIVED

SECURITY FOREIGN LICENSE

FORMAT NO. 3

A-5469115AS

ATTORNEY DOCKET NUMBER (12 Spaces)

0415911

267324

324

111

116

20

750

750

750

FORMAT NO. 4 Applicant's Name & Address

A-5469115AS

ATTORNEY DOCKET NUMBER (12 Spaces)

0415911

267324

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FORMAT NO. 8

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BAR CODE LABEL 		U.S. PATENT APPLICATION			
SERIAL NUMBER 07/685,878		FILING DATE 04/15/91	CLASS 324	GROUP ART UNIT 267	
APPLICANT DANIEL B. D'SOUZA, SANTA CLARA, CA. **CONTINUING DATA***** VERIFIED **FOREIGN/PCT APPLICATIONS***** VERIFIED FOREIGN FILING LICENSE GRANTED 06/20/91					
STATE OR COUNTRY CA	SHEETS DRAWING 11	TOTAL CLAIMS 16	INDEPENDENT CLAIMS 2	FILING FEE RECEIVED \$ 750.00	ATTORNEY DOCKET NO. A-54691/JAS
ADDRESS FLEHR, HOHBACH, TEST ALBRITTON & HERBERT STE. 3400, FOUR EMBARCADERO CENTER SAN FRANCISCO, CA 94111					
TITLE ACTIVE PROBE CARD					
This is to certify that annexed hereto is a true copy from the records of the United States Patent and Trademark Office of the application as originally filed which is identified above. By authority of the COMMISSIONER OF PATENTS AND TRADEMARKS Date _____ Certifying Officer _____					



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

07/685878

Date: April 15, 1991

File No. A-54691/JAS

Commissioner of Patents
and Trademarks
Washington, DC 20231

"EXPRESS MAIL" MAILING LABEL

NUMBER NB 179 600 377

DATE OF DEPOSIT April 15, 1991

I HEREBY CERTIFY THAT THIS PAPER OR FEE IS

BEING DEPOSITED WITH THE UNITED STATES

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TO ADDRESSEE" SERVICE UNDER 37 CFR 1.10 ON

THE DATE INDICATED ABOVE AND IS ADDRESSED

TO: THE COMMISSIONER OF PATENTS AND

TRADEMARKS, WASHINGTON, DC 20231.

TYPED NAME Roberta Morehead

SIGNED

Sir:

Transmitted herewith for filing is the patent application of Inventor(s):

DANIEL B. D'SOUZA

For: ACTIVE PROBE CARD

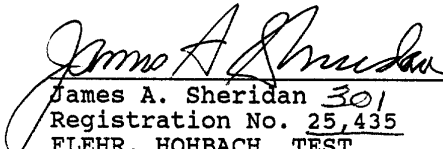
Enclosed are also:

☐ Prior Art Statement☒ 11 Sheets of drawing, Formal ☐, Informal ☒☐ An Assignment of the invention to:☐ Power of Attorney by Assignee & Exclusion of Inventor Under 37 CFR 1.32☐ Combined Declaration and Power of Attorney for Patent Application☒ Declaration for Patent Application (UNEXECUTED)☐ Associate Power of Attorney☐ Small Entity Status Declaration Under 37 CFR

FOR:	(Col. 1) NO. FILED	(Col. 2) NO. EXTRA	SMALL ENTITY RATE	FEE	OTHER THAN A SMALL ENTITY OR RATE	FEE
BASIC FEE				\$315	OR	\$630
TOTAL CLAIMS	16 -20 =	* 0	x10 =	\$	OR	x20 = \$
INDEP CLAIMS	2 -3 =	* 0	x30 =	\$	OR	x60 = \$
[] MULTIPLE DEPENDENT CLAIM PRESENTED			+60 =	\$	OR	+120 = \$
*If the difference in Col. 1 is less than zero, enter "0" in Col. 2.			TOTAL	\$	OR TOTAL	\$630

☒ Our Check No. 40865 in the amount of \$630.00 to cover the filing fee is enclosed.☐ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1300 (Order No. A- /). Two copies of this sheet are enclosed.

Respectfully submitted,


James A. Sheridan 301
Registration No. 25,435
FLEHR, HOHBACH, TEST,
ALBRITTON & HERBERT
Suite 3400, Four Embarcadero Center
San Francisco, California 94111-4187
Telephone: (415) 781-1989

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

24 APR 15 1991
 Date: April 15, 1991
 File No: 98-54691/JAS
 Commissioner of Patents
 and Trademarks
 Washington, DC 20231

"EXPRESS MAIL" MAILING LABEL
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TYPED NAME Roberta Morehead

SIGNED

Sir:

Transmitted herewith for filing is the patent application of Inventor(s):

DANIEL B. D'SOUZA

For: ACTIVE PROBE CARD

Enclosed are also:

____ Prior Art Statement
☒ 11 Sheets of drawing, Formal _____, Informal ☒
 ____ An Assignment of the invention to:

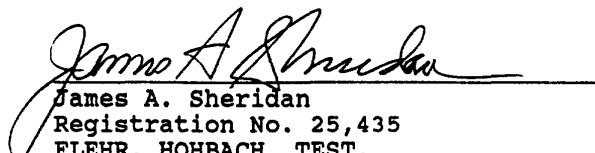
____ Power of Attorney by Assignee & Exclusion of Inventor Under 37 CFR 1.32
 ____ Combined Declaration and Power of Attorney for Patent Application
☒ Declaration for Patent Application (UNEXECUTED)
 ____ Associate Power of Attorney
 ____ Small Entity Status Declaration Under 37 CFR _____

FOR:	(Col. 1) NO. FILED	(Col. 2) NO. EXTRA	SMALL ENTITY RATE FEE	OTHER THAN A SMALL ENTITY OR RATE FEE
BASIC FEE			\$315	OR \$630
TOTAL CLAIMS	16 -20 = *	0	x10 = \$	OR x20 = \$
INDEP CLAIMS	2 -3 = *	0	x30 = \$	OR x60 = \$
[] MULTIPLE DEPENDENT CLAIM PRESENTED			+60 = \$	OR +120 = \$
*If the difference in Col. 1 is less than zero, enter "0" in Col. 2.			TOTAL \$	OR TOTAL \$630

☒ Our Check No. 40865 in the amount of \$630.00 to cover the filing fee is enclosed.

____ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1300 (Order No. A- /). Two copies of this sheet are enclosed.

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 James A. Sheridan
 Registration No. 25,435
 FLEHR, HOHBACH, TEST,
 ALBRITTON & HERBERT
 Suite 3400, Four Embarcadero Center
 San Francisco, California 94111-4187
 Telephone: (415) 781-1989


**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY DOCKET NO./TITLE
07/685,878	04/15/91	D'SOUZA	D A-54691/JAS

 FLEHR, HOHBACH, TEST
ALBRITTON & HERBERT
STE. 3400, FOUR EMBARCADERO CENTER
SAN FRANCISCO, CA 94111

000

DATE MAILED: 05/08/91

**NOTICE TO FILE MISSING PARTS OF APPLICATION
FILING DATE GRANTED**

A filing date has been granted to this application. However, the following parts are missing.

If all missing parts are filed within the period set below, the total amount owed by applicant as a

☒ large entity, ☐ small entity (verified statement filed), is \$ 120.00

- ☐ The statutory basic filing fee is: ☐ missing ☐ insufficient. Applicant as a ☐ large entity ☐ small entity, must submit \$ _____ to complete the basic filing fee and **MUST ALSO SUBMIT THE SURCHARGE AS INDICATED BELOW.**
- ☐ Additional claim fees of \$ _____ as a ☐ large entity ☐ small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due. **NO SURCHARGE IS REQUIRED FOR THIS ITEM.**
- ☐ The oath or declaration:
 - ☐ is missing.
 - ☐ does not cover items omitted at time of execution.

An oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date is required. A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.

- ☐ The oath or declaration does not identify the application to which it applies. An oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date is required. A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.
- ☒ The signature to the oath or declaration is: ☐ missing; ☐ a reproduction; ☐ by a person other than the inventor or a person qualified under 37 CFR 1.42, 1.43, or 1.47. A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date is required. A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.
- ☐ The signature of the following joint inventor(s) is missing from the oath or declaration: _____ An oath or declaration listing the names of all inventors and signed by the omitted inventor(s), identifying this application by the above Application Number and Receipt Date is required. A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.
- ☐ The application was filed in a language other than English. Applicant must file a verified English translation of the application and a fee of \$30.00 under 37 CFR 1.17(k), unless this fee has already been paid. **NO SURCHARGE IS REQUIRED FOR THIS ITEM.**
- ☐ A \$50.00 processing fee is required for returned checks. (37 CFR 1.21(m)).
- ☐ Your filing receipt was mailed in error because check was returned without payment.
- ☐ Other.

 An Application Number and Filing Date have been assigned to this application. The missing parts and fees identified above in items 1 and 3-6 must be timely provided **ALONG WITH THE PAYMENT OF A SURCHARGE** of \$120.00 for large entities or \$60.00 for small entities who have filed a verified statement claiming such status. The surcharge is set forth in 37 CFR 1.16(e). Applicant is given **ONE MONTH FROM THE DATE OF THIS LETTER, OR TWO MONTHS FROM THE FILING DATE** of this application, **WHICHEVER IS LATER**, within which to file all missing parts and pay any fees required above to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

 Direct the response to, and any questions about, this notice to **ATTENTION: Application Division, Special Handling Unit.**
A copy of this notice MUST be returned with response.

 For: Manager, Application Division 92
(703) 557- 568 1202



120-105-A/N

**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY DOCKET NO./TITLE
07/488,470	04/15/91	PROXIMA	1 105 120.00

STENN, RONALD, TEST
INVENTOR'S HERBERT
SIL, VERN, FOUR EMPACANDU CENTER
NEW BRUNSWICK, NJ 07101

DATE MAILED: 05/01/91

**NOTICE TO FILE MISSING PARTS OF APPLICATION
FILING DATE GRANTED**

A filing date has been granted to this application. However, the following parts are missing.

If all missing parts are filed within the period set below, the total amount owed by applicant as a

☒ large entity, ☐ small entity (verified statement filed), is \$ 120.00.

1. ☐ The statutory basic filing fee is: ☐ missing ☐ insufficient. Applicant as a ☐ large entity ☐ small entity, must submit \$ _____ to complete the basic filing fee and **MUST ALSO SUBMIT THE SURCHARGE AS INDICATED BELOW.**
2. ☐ Additional claim fees of \$ _____ as a ☐ large entity ☐ small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due. **NO SURCHARGE IS REQUIRED FOR THIS ITEM.**
3. ☐ The oath or declaration:
 - ☐ is missing.
 - ☐ does not cover items omitted at time of execution.

An oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date is required. **A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.**
4. ☐ The oath or declaration does not identify the application to which it applies. An oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date is required. **A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.**
5. ☒ The signature to the oath or declaration is: ☐ missing; ☒ a reproduction; ☐ by a person other than the inventor or a person qualified under 37 CFR 1.42, 1.43, or 1.47. A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date is required. **A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW..**
6. ☐ The signature of the following joint inventor(s) is missing from the oath or declaration: _____
An oath or declaration listing the names of all inventors and signed by the omitted inventor(s), identifying this application by the above Application Number and Receipt Date is required. **A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.**
7. ☐ The application was filed in a language other than English. Applicant must file a verified English translation of the application and a fee of \$30.00 under 37 CFR 1.17(k), unless this fee has already been paid. **NO SURCHARGE IS REQUIRED FOR THIS ITEM.**
8. ☐ A \$50.00 processing fee is required for returned checks. (37 CFR 1.21(m)).
9. ☐ Your filing receipt was mailed in error because check was returned without payment.
10. ☐ Other.

An Application Number and Filing Date have been assigned to this application. The missing parts and fees identified above in items 1 and 3-6 must be timely provided **ALONG WITH THE PAYMENT OF A SURCHARGE** of \$120.00 for large entities or \$60.00 for small entities who have filed a verified statement claiming such status. The surcharge is set forth in 37 CFR 1.16(e). Applicant is given **ONE MONTH FROM THE DATE OF THIS LETTER, OR TWO MONTHS FROM THE FILING DATE** of this application, **WHICHEVER IS LATER**, within which to file all missing parts and pay any fees required above to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

Direct the response to, and any questions about, this notice to **ATTENTION: Application Division,
Special Handling Unit.**

080 CJ 06/05/91 07485878

1 105 120.00 CK

A copy of this notice MUST be returned with response.

For: Manager, Application Division
(703) 557- 368 1202



DECLARATION FOR PATENT APPLICATION

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled ACTIVE PROBE CARD

the specification of which

(check one) _____ is attached hereto.

X was filed on April 15, 1991 as
Application Serial No. 07/685,878
and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)			Priority Claimed	
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No
____	____	____	____	____
____	____	____	____	____
____	____	____	____	____

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulation, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
____	____	____
____	____	____

Direct all telephone calls to James A. Sheridan at (415) 494-8700.

Address all correspondence to:

602
70 FLEHR, HOHBACH, TEST
ALBRITTON & HERBERT
Suite 3400, Four Embarcadero Center
San Francisco, California 94111

File No. A-54681/JAS

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18, United States Code, §1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or
first inventor:

860-88
DANIEL B. D'SOUZA

Inventor's signature:

AKashy

Date:

5/21/91

Residence:

Santa Clara County, California

CA

Citizenship:

United States of America

Post Office Address:

17999 Saratoga-Los Gatos Road

Monte Sereno, California 95030



POWER OF ATTORNEY BY ASSIGNEE
AND EXCLUSION OF INVENTOR UNDER 37 C.F.R.1.32
(Not Accompanying Application)

To the Commissioner of Patents and Trademarks

The undersigned assignee of the entire interest in application for letters patent entitled ACTIVE PROBE CARD, and having the following-named inventor:

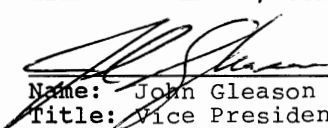
Daniel B. D'Souza

Serial No. 07/685,878 filed April 15, 1991, hereby appoints the following attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith; said appointment to be to the exclusion of the inventor(s) and his (their) attorney(s) in accordance with the provisions of 37 C.F.R. 1.32: Harold C. Hohbach, Reg. 17,757; Aldo J. Test, Reg. 18,048; Thomas O. Herbert, Reg. 18,612; Donald N. MacIntosh, Reg. 20,316; Jerry G. Wright, Reg. 20,165; Edward S. Wright, Reg. 24,903; David J. Brezner, Reg. 24,774; Richard E. Backus, Reg. 22,701; James A. Sheridan, Reg. 25,435; Robert B. Chickering, Reg. 24,286; Willis E. Higgins, Reg. 23,025; Gary S. Williams, Reg. 31,066; Richard F. Trecartin, Reg. No. 31,801; Stephen C. Durant, Reg. No. 31,506; C. Michael Zimmerman, Reg. No. 20,451; and Walter H. Dreger, Reg. No. 24,190; provided that if any one of said attorneys ceases being affiliated with the law firm of Flehr, Hohbach, Test, Albritton and Herbert as partner, employee or of counsel, such attorney's appointment as attorney and all powers derived therefrom shall terminate on the date such attorney ceases being so affiliated.

Direct all telephone calls to James A. Sheridan at (415) 494-8700.
Address all correspondence to:

601 FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT
602 Suite 3400, Four Embarcadero Center
San Francisco, CA 94111

701 HITACHI AMERICA, LTD.


Name: John Gleason
Title: Vice President

Date: May 20, 1991

File No. A-54681/JAS


**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

 Address : COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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07/685,878 04/15/91 D'SOUZA

D A-54691/JAS

EXAMINER

BURNS, W

 FLEHR, HOHBACH, TEST
ALBRITTON & HERBERT
STE. 3400, FOUR EMBARCADERO CENTER
SAN FRANCISCO, CA 94111

ART UNIT PAPER NUMBER

267

DATE MAILED:

09/10/91

 This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

 A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input checked="" type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input checked="" type="checkbox"/> <u>LIST OF BONDED DRAFTSMEN</u> |

Part II SUMMARY OF ACTION

 1. ☒ Claims 1-16 are pending in the application.

Of the above, claims _____ are withdrawn from consideration.

 2. ☐ Claims _____ have been cancelled.

 3. ☐ Claims _____ are allowed.

 4. ☒ Claims 1-16 are rejected.

 5. ☐ Claims _____ are objected to.

 6. ☐ Claims _____ are subject to restriction or election requirement.

 7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

 8. ☐ Formal drawings are required in response to this Office action.

 9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

 10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

 11. ☐ The proposed drawing correction, filed _____, has been ☒ approved; ☐ disapproved (see explanation).

 12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.

 13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

 14. ☐ Other

EXAMINER'S ACTION

Serial No. 685,878

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Art Unit 267A

1. The Abstract of the Disclosure is objected to because the abstract is of excessive length, and in multi-paragraph form.

Correction is required. See M.P.E.P. § 608.01(b).

2. Applicant is reminded of the proper language and format of an Abstract of the Disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said", should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1, 3, and 8 are rejected under 35 U.S.C. § 102(e) as being anticipated by Wiscombe et al, Bove et al, Leedy, Cho, or

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Art Unit 267A

Petrich.

Wiscombe et al, Bove et al, Leedy, Cho, and Petrich each show a circuit board with test circuitry thereupon, with test signal ports, and connectors connecting to connectors of tested circuitry. The connecting means comprises conductive traces, pads, and probe pins.

5. Claim 4 is rejected under 35 U.S.C. § 102(e) as being anticipated by Cho.

Cho applies and above, and in addition shows a central aperture, with probe pins extending into it.

6. Claim 6 is rejected under 35 U.S.C. § 102(e) as being anticipated by Cho or Petrich.

Cho and Petrich each apply as for claims 1, 3, and 8, and in addition show ac/dc parametric testing with analog circuitry.

7. Claim 7 is rejected under 35 U.S.C. § 102(e) and (b) as being anticipated by Petrich or Bove et al.

Bove et al applies as for claims 1, 3, and 8, and in addition shows test circuitry (figs. 2, 3) comprising bidirectional, user-oriented cells. Petrich applies as for claims 1, 3, and 8, and in addition (see fig. 7) shows bidirectional "pin electronics cards" cells being configured by a user for testing.

8. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

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Art Unit 267A

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

9. Claim 2 is rejected under 35 U.S.C. § 103 as being unpatentable over Bove et al, or Petrich, or Leedy, or Cho, or Wiscombe et al.

Bove, Petrich, Leedy, Cho, and Wiscombe apply as for claims 1, 3, and 8. In addition, it would be a matter of conventional design choice to configure the circuitry to IEEE std. 1149.1 given that is an official, conventional standard, able to mate with many types of tested circuits.

10. Claim 5 is rejected under 35 U.S.C. § 103 as being unpatentable over Bove et al, Leedy, or Wiscombe as applied to claims 1, 3, and 8 above, and further in view of Sokolich.

Sokolich shows a probe card (component 16) comprising scan-testing shift registers.

It would have been obvious to one ordinarily-skilled in the art to modify the apparatus of Bove, Leedy, or Wiscombe as taught

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Art Unit 267A

by Sokolich, to provide shift registers for the test circuitry, in order to efficiently parallel test a multitude of IC circuits quickly; and to further modify to (in particular to boundary scan-testing) using the shift registers, in order to accurately test complex IC circuitry.

11. Claims 9, 11, and 14-16 are rejected under 35 U.S.C. § 102(e) as being anticipated by Petrich.

Petrich applies as for claims 1, 3, and 8; and in addition shows selection means (component 102 of fig. 7) which can select internal (from components 82, 84, 86 et al) or external (from component 60) test signals.

12. Claims 9, 11, and 16 are rejected under 35 U.S.C. § 103 as being unpatentable over Bove et al, or Leedy or Cho or Wiscombe as applied to claims 1, 3, and 8 above, and further in view of Hiwada et al or Petrich.

Hiwada and Petrich show a test head apparatus with test circuitry selecting either internal or external test signals.

It would have been obvious to one ordinarily-skilled in the art to modify the test apparatus of Bove or Leedy or Cho or Wiscombe as taught by Hiwada or Petrich, to enable a wider array of test signals to be generated (permitting more comprehensive testing) by providing internal/external test selection means.

13. Claim 10 is rejected under 35 U.S.C. § 103 as being unpatentable over Petrich; or Bove et al, Leedy, Cho, or Wiscombe

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Art Unit 267A

in view of Hiwada or Petrich.

Petrich, Bove, Leedy, Cho, Wiscombe, and Hiwada each apply as discussed above. In addition, it would further be a matter of conventional design choice to have the test head follow IEEE std. 1149.1, as discussed for claim 2.

14. Claim 12 is rejected under 35 U.S.C. § 103 as being unpatentable over Cho as applied to claims 4, 9, 11, and 16 above, and further in view of Hiwada or Petrich.

Hiwada and Petrich apply as for claims 9, 11, and 16. It would have been obvious to one ordinarily-skilled in the art to modify the apparatus of Cho as taught by Hiwada or Petrich, as discussed for claims 9, 11, and 16.

15. Claim 13 is rejected under 35 U.S.C. § 103 as being unpatentable over Bove et al, Leedy, or Wiscombe in view of Hiwada or Petrich as applied to claims 9, 11, and 16 above, and further in view of Sokolich.

Sokolich applies as for claim 5. It would have been obvious to one ordinarily-skilled in the art to modify the apparatus of Bove, Leedy, or Wiscombe as taught by Hiwada or Petrich; and to further modify as taught by Sokolich as per claim 5.

16. Claim 14 is rejected under 35 U.S.C. § 103 as being unpatentable over Cho in view of Hiwada or Petrich.

Cho, Petrich, and Hiwada apply as for claims 9, 11, and 16, and in addition, Cho shows ac/dc parametric testing.

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Art Unit 267A

17. Claim 15 is rejected under 35 U.S.C. § 103 as being unpatentable over Bove in view of Hiwada or Petrich.

Bove, Hiwada, and Petrich apparently as for claims 9, 11, and 16; and in addition Bove shows bi-directional cells which are user-oriented.

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hsieh shows boundary-scan testing.

Maelzer and Dehmel each show PCB test head apparatus.

W.B. 9/9/91
W. BURNS:rf
September 23, 1991

Kenneth A. Wieder
KENNETH A. WIEDER
SUPERVISORY PATENT EXAMINER
ART UNIT 267A

TO SEPARATE, HOLD TOP AND BOTTOM EDGES, SNAP-APART AND DISCARD CARBON

FORM PTO-892 (REV. 3-78)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		SERIAL NO. 07/685878	GROUP/ART UNIT 267A	ATTACHMENT TO PAPER NUMBER 4	
NOTICE OF REFERENCES CITED				APPLICANT(S) D. Souza			
U.S. PATENT DOCUMENTS							
•	DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE	
A	4963824	10/90	Norish et al	324	158F	11/88	
B	4975639	12/90	Niwada et al	324	158P	8/88	
C	4517512	5/85	Petrush et al	—	—		
D	4465972	8/84	Sokolich	324	158P		
E	5020219	6/91	Zeedy	324	158P	11/89	
F	5014002	5/91	Wiscombe et al	324	158P	4/89	
G	4038599	7/77	Bowl et al	324	158P		
H	4626775	12/86	Cho et al	324	158F		
I	4724377	2/88	Maelyer et al	324	158F		
J	4417204	11/83	Behmer et al	324	158F		
K							
FOREIGN PATENT DOCUMENTS							
•	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUB-CLASS	PERTINENT SHTS. DWG. PP. SPEC.
L							
M							
N							
O							
P							
Q							
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)							
R							
S							
T							
U							
EXAMINER B. Burnett		DATE 8/24/91					
* A copy of this reference is not being furnished with this office action. (See Manual of Patent Examining Procedure, section 707.05 (a).)							

PTO FORM 948
(REV. 5-90)U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

ATTACHMENT TO PAPER NUMBER

4

APPLICATION NUMBER

685878

NOTICE OF DRAFTSMAN'S PATENT DRAWING REVIEWTHE PTO DRAFTSMEN REVIEW ALL ORIGINALLY FILED DRAWINGS REGARDLESS
OF WHETHER THEY WERE DESIGNATED AS INFORMAL OR FORMAL.

The drawings filed

4/15/91

A. ☐ are approved.B. ☒ are objected to under 37 CFR 1.84 for the reason(s) checked below. The examiner will require submission of new, corrected drawings at the appropriate time. Corrected drawings must be submitted according to the instructions listed on the back of this Notice.

1. Paper and ink. 37 CFR 1.84(a)

☐ Sheet(s) _____ Poor.

2. Size of Sheet and Margins. 37 CFR 1.84(b)

Acceptable Paper Sizes and Margins

Margin	Paper Size		DIN size A4 21 by 29.7 cm.
	8 1/2 by 14 inches	8 1/2 by 13 inches	
Top	2 inches	1 inch	2.5 cm.
Left	1/4 inch	1/4 inch	2.5 cm.
Right	1/4 inch	1/4 inch	1.5 cm.
Bottom	1/4 inch	1/4 inch	1.0 cm.

☐ Proper Size Paper Required.
All Sheets Must be Same Size.

Sheet(s) _____

☒ Proper Margins Required.Sheet(s) 6, 12, 19☐ TOP☐ RIGHT☐ LEFT☐ BOTTOM

3. Character of Lines. 37 CFR 1.84(c)

☒ Lines Pale or Rough and Blurred must be sharp
Fig(s) 12-11☐ Solid Black Shading Not Allowed.
Fig(s) _____

4. Hatching and Shading. 37 CFR 1.84(d)

☐ Shade Lines are Required.

Fig(s) _____

☐ Criss-Cross Hatching Not Allowed.

Fig(s) _____

☐ Double Line Hatching Not Allowed.

Fig(s) _____

☐ Parts in Section Must be Hatched.

Fig(s) _____

5. Reference Characters. 37 CFR 1.84(f)

☒ numerals must be uniform & sharp 3/6" tall
Reference Characters Poor or Incorrectly SizedFig(s) 12-11☐ Reference Characters Placed Incorrectly.

Fig(s) _____

6. Views. 37 CFR 1.84(i) & (j)

☐ Figures Must be Numbered Properly.☐ Figures Must Not be Connected.

Fig(s) _____

7. ☐ Photographs Not Approved.8. ☒ Fig. legends must be uniform
(No 1-11)

Telephone inquiries concerning this review should be directed to the Chief Draftsman at telephone number (703) 557-6404.

Reviewing Draftsman_____
Date